

SEVERE WEATHER AWARENESS WEEK

Severe Weather Awareness Week in Indiana is March 2-8, 2003

SPRING, 2003

Governor Frank O'Bannon has proclaimed March 2-8, 2003 as Severe Weather Awareness Week in Indiana. The National Weather Service, in conjunction with the Indiana State Police, Indiana State Emergency Management, the Indiana School System, the broadcast media across Indiana, and amateur radio operators will conduct a statewide test of communications systems on **Wednesday March 5 between 200 and 230 P.M. EST and between 700 and 730 P.M. EST.**

The goals of Severe Weather Awareness Week are to educate about the hazards of severe thunderstorms and tornadoes, to help everyone be prepared when severe weather strikes, and to have an understanding of severe weather terms and tornado safety rules.

Daily statements will be issued on newswires and NOAA Weather Radio during the week. The Northern Indiana National Weather Service Office (WFO IWX) and surrounding National Weather Service offices will be available throughout the week for interviews or questions. Tornado drill details can be found on page 2 of this publication.

Severe Weather Awareness Week in Michigan is March 16-22, 2003

Visit <http://www.michiganweather.org> for more information, including drill day and times.

Severe Weather Awareness Week in Ohio is March 23-29, 2003

Visit <http://www.state.oh.us/odps/division/ema/Spring2003.pdf> for more information, including drill day and test time.

Is your community StormReady?

On November 10th, 2002, an F4 Tornado ripped a 53 mile long path of destruction in Ohio from southwestern Van Wert County into Henry County. In Van Wert County, the tornado claimed 2 lives and injured 17. Only the tornado warnings issued by the weather service and the prompt action by those receiving the warnings, prevented a greater loss of life. The benefits of being StormReady were illustrated at the Van Wert Cinemas, where a tornado warning was broadcast live over a local warning alert system.

Full color HTML and PDF versions of this publication are available on-line at:
<http://www.crh.noaa.gov/iwx/publications>

INSIDE THIS ISSUE:

Tornado Drill	2
Severe Weather Stats	2
Severe Weather Terms	3
Tornado Facts/Safety	4
Flood Facts/Safety	5
Lightning Facts/Safety	5
NOAA Weather Radio	6
Lightning Safety Week	6
Internet Sites	7
Spotter Training	8

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Severe Weather Terms and Definitions

Warning — A product issued by the NWS indicating that a particular weather hazard is either imminent or is occurring. A warning indicates the need to take immediate action to protect life and property. Typical warnings include *tornado warning*, *severe thunderstorm warning*, and *flash flood warning*.

Watch — A product issued by the NWS indicating that conditions are favorable for a particular weather hazard. A watch is usually issued for a time period of several hours and indicates a need for planning, preparation, and an increased awareness of changing weather conditions. Typical watches include: *tornado watch*, *severe thunderstorm watch*, and *flash flood watch*.

Tornado — A violently rotating column of air in contact with the ground, descending from the base of a severe thunderstorm.

Severe Thunderstorm — A thunderstorm that produces a tornado, damaging winds of 58 mph or higher, and/or hail at least three-quarters of an inch in diameter.

Flash flood — A flood which happens within a few hours after a heavy rainfall or from the failure of a dam, levee, or ice jam.

Flood — A flood occurs when water overflows the confines of a stream or body of water, or accumulates in poorly drained low-lying or urban areas.

Funnel cloud — A violently rotating column of air that does not reach the ground. If the funnel cloud reaches the ground, it becomes a tornado.

Straight line winds — Thunderstorm wind that produces damage with little indication of any rotation, as opposed to tornado-produced damage that does exhibit a rotational damage pattern.

Downburst — A strong downdraft that exits the base of a thunderstorm and hits the earth's surface, resulting in strong gusty winds that may cause property damage.

Squall line — Any narrow band of thunderstorms...sometimes as much as several hundred miles long.

Gust front — The leading edge of a mass of cool, gusty air that flows ahead of a thunderstorm.

Waterspout — A rotating column of air descending from the base of a cumulus cloud over a large body of water, that reaches the water surface.

Cold air funnels — Weak funnel clouds that typically remain aloft. They form in cold unstable air masses and are not generally associated with severe thunderstorms.

StormReady (*Continued from Page 1*)

Theater management responded by moving over 50 adults and children to a more secure portion of the theater, just minutes before the tornado struck.

A key requirement for becoming StormReady is having multiple ways to receive severe weather warnings and forecasts and having several ways to alert the public. The warning alert system at the Van Wert Cinemas was one of 70 systems purchased by the Van Wert County Emergency Management as part of meeting the requirements to become StormReady. Van Wert County was designated StormReady on January 10, 2002. Becoming StormReady helps community leaders and emergency managers strengthen their hazardous weather operations. StormReady communities are better prepared to save lives from the onslaught of severe weather through planning, education, and awareness. Is your community StormReady? For more information, visit the StormReady Web site at: <http://www.nws.noaa.gov/stormready>.

Tornado Facts

- ▽ Tornadoes can occur at any time of the year
- ▽ Tornadoes are most likely to occur between 3 and 9 P.M., but have been known to occur at all hours of the day and night
- ▽ The average tornado moves from southwest to northeast, but tornadoes have been known to move in any direction
- ▽ The average forward speed is 30 mph, but may vary from nearly stationary to 70 mph
- ▽ Indiana averages 20 tornadoes and 4 tornado fatalities each year

Tornado Distribution and Characteristics

Weak Tornadoes (F0,F1)

- ▽ 88% of all tornadoes
- ▽ Less than 5% of deaths
- ▽ Lifetime of 1-10+ minutes
- ▽ Winds less than 110 mph

Strong Tornadoes (F2,F3)

- ▽ 11% of all tornadoes
- ▽ Nearly 30% of deaths
- ▽ May last 20 minutes or longer
- ▽ Winds of 110-205 mph

Violent Tornadoes (F4,F5)

- ▽ Less than 1% of all tornadoes
- ▽ Approximately 70% of all tornado deaths
- ▽ Lifetime may exceed 1 hour
- ▽ Winds greater than 205 mph

Tornado Facts for the WFO IWX CWFA

- ▽ An average of 9 tornadoes occur per year
- ▽ The peak month for tornado occurrence is June
- ▽ Nearly 90 percent of the tornadoes occur between noon and midnight.

Did You Know?

In an average year, 1,200 tornadoes cause 70 fatalities and 1,500 injuries nationwide.

Tornado Safety Rules

At Home

- ▽ Move to the interior of the lowest floor possible
- ▽ Stay away from windows
- ▽ Interior bathrooms offer excellent shelter
- ▽ Leave mobile homes immediately, and proceed to the nearest designated shelter

At School or Work

- ▽ Move students quickly into interior hallways on the lowest floor
- ▽ Stay out of rooms with large free-span ceilings such as gymnasiums and cafeterias
- ▽ Keep children at school beyond regular hours if severe weather is expected

In a Vehicle

- ▽ Never try to outrun a tornado. They can change speed and direction without warning
- ▽ Leave the vehicle and find nearby safe shelter
- ▽ If no shelter is available, crouch in a ditch or ravine, covering your head. Be wary of flash flooding.

Flood/Flash Flood Facts

- #1 weather-related killer in the United States...more than 140 fatalities each year
- Responsible for billions of dollars in damage each year
- Most deaths occur at night and when people become trapped in automobiles

Did You Know?

A water depth of two feet will cause most vehicles to float.

Flood/Flash Flood Safety

- If flooding is observed or a warning is issued, move to a safe area before access is cut off by flood water
- If advised to evacuate, do so immediately
- Never let children play near high water, storm drains, or viaducts
- Never drive through flooded areas as the road bed may not be intact under the flood waters
- If the vehicle stalls, leave it immediately and seek higher ground
- Be especially cautious at night when it is more difficult to recognize flood dangers
- Do not camp or park your vehicle along streams and washes

Lightning Facts

- Responsible for 73 fatalities and 300 injuries each year nationwide
- Causes several hundred million dollars in damage to property annually
- Most lightning fatalities and injuries occur when people are caught outdoors in the summer months during the afternoon and evening

Did You Know?

Counting the number of seconds between a flash of lightning and the next clap of thunder, then dividing this number by 5, will determine the distance to the lightning in miles

Lightning Safety

- Check the forecast before leaving for extended periods outdoors
- Watch for signs of approaching storms
- Postpone outdoor activities if thunderstorms are imminent
- If you can hear thunder, seek shelter in a building or car immediately
- Get out of boats and away from water
- Avoid using the telephone or other electrical appliances
- If caught outside, find a low spot away from trees, fences, and poles
- If you feel your skin tingle or your hair stands on end, squat low to the ground on the balls of your feet

30/30 Lightning

Rule: *If after seeing lightning, you cannot count to 30 before hearing thunder, take shelter...stay indoors for 30 minutes after hearing the last clap of thunder.*

NOAA Weather Radio

Voice of the National Weather Service

Specific Area Message Encoder (SAME) codes for programmable weather radios:

Northern Indiana

Adams 018001
 Allen 018003
 Blackford 018009
 Cass 018017
 Dekalb 018033
 Elkhart 018039
 Fulton 018049
 Grant 018053
 Huntington 018069
 Jay 018075
 Kosciusko 018085
 Lagrange 018087
 La Porte 018091
 Marshall 018099
 Miami 018103
 Noble 018113
 Pulaski 018131
 St. Joseph 018141
 Starke 018149
 Steuben 018151
 Wabash 018169
 Wells 018179
 Whitley 018183
 White 018181

Northwest Ohio

Allen 039003
 Defiance 039039
 Fulton 039051
 Henry 039069
 Paulding 039125
 Putnam 039137
 Williams 039161
 Van Wert 039171

Southwest Michigan

Berrien 026021
 Branch 026023
 Cass 026027
 St. Joseph 026149
 Hillsdale 026059

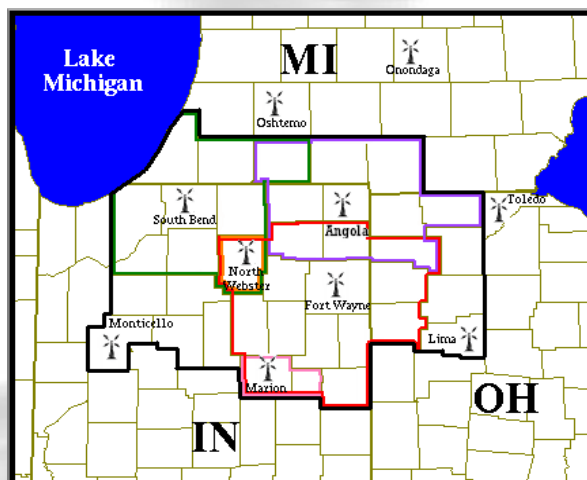
LIGHTNING SAFETY AWARENESS WEEK JUNE 22-28, 2003

Summer is the peak season for one of the nation's deadliest weather phenomena - lightning. Safeguarding U.S. residents from dangerous lightning is the goal of NOAA's public awareness campaign, "Lightning Kills, Play It Safe." The campaign is designed to lower lightning death and injury rates and America's vulnerability to one of nature's deadliest hazards.

In the United States, an average of 73 people are killed each year by lightning. That's more than the annual number of people killed by tornadoes or hurricanes. Many more are struck, but survive. However, they often report a variety of long-term, debilitating symptoms, including memory loss, attention deficits, sleep disorders, numbness, dizziness, stiffness in joints, irritability, fatigue, weakness, muscle spasms, depression, and an inability to sit for long periods of time. Lightning also causes about \$5 billion dollars of economic loss each year in the U.S.

The vast majority of lightning casualties can be easily, quickly, and cheaply avoided, simply by people taking appropriate safety precautions.

The purpose of Lightning Safety Awareness Week is to increase awareness of lightning hazards and educate about lightning safety. To learn how to protect yourself, your loved ones, and your belongings, visit the Lightning Safety web page at: <http://www.lightningsafety.noaa.gov>.



NWR Frequencies

Angola.....	162.425 MHz
Fort Wayne.....	162.550 MHz
Lima.....	162.400 MHz
Marion.....	162.450 MHz
Monticello.....	162.475 MHz
North Webster.....	162.500 MHz
Onondaga.....	162.400 MHz
Oshkosh.....	162.475 MHz
South Bend.....	162.400 MHz

For more information, visit the NOAA Weather Radio Web Site at <http://www.nws.noaa.gov/nwr>.

For special needs NOAA Weather Radio information, visit <http://www.nssl.noaa.gov/~wood/NWR/spc-nds-nwr>.

Did You Know?

Special needs NOAA Weather Radios designed to meet the needs of the deaf and hard-of-hearing are available.

Internet Sites and Contacts

National Oceanic and Atmospheric Administration (NOAA)

<http://www.noaa.gov>



National Weather Service

<http://www.nws.noaa.gov>

Federal Emergency Management Agency

<http://www.fema.gov/fima>

National Weather Service Northern Indiana

<http://www.crh.noaa.gov/iwx>

Interactive Weather Information Network

<http://iwin.nws.noaa.gov/emwin/index.htm>

National Weather Service Indianapolis

<http://www.crh.noaa.gov/ind>

Indiana State Emergency Management Agency

<http://www.in.gov/sema>

National Weather Service Office of Meteorology
Severe Weather Awareness Page

<http://www.nws.noaa.gov/om/severeweather>

Indiana State Police

<http://www.in.gov/isp>

National Weather Service Office of Hydrology

<http://www.nws.noaa.gov/oh>

Indiana Department of Education

<http://ideanet.doe.state.in.us/safety>

Storm Prediction Center

<http://www.spc.noaa.gov>

Climate Prediction Center

<http://www.cpc.ncep.noaa.gov>

National Hurricane Center

<http://www.nhc.noaa.gov>

National Climatic Data Center

<http://lwf.ncdc.noaa.gov/oa/ncdc.html>

NOAA Weather Radio

<http://www.nws.noaa.gov/nwr>

Midwest Climate Center

<http://mcc.sws.uiuc.edu>

Skywarn

<http://www.skywarn.org>

Indiana State Emergency Management Agency

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Indiana Department of Education

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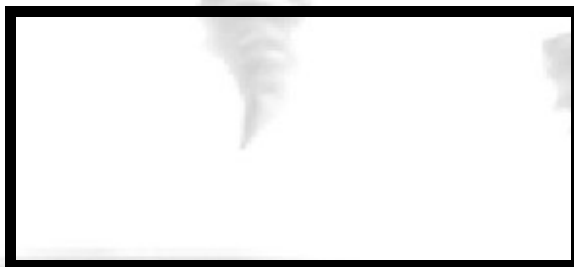
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Visit the following Web site for more information: <http://home.attbi.com/~lapcoskywarn/training.html>



Wanted:
Severe Weather Spotters

For a training session near you, click on the 2003 Calendar link on the WFO IWX Internet Homepage or go to: <http://www.crh.noaa.gov/iwx/outreach/index.shtml>